



ecology and environment, inc.

CLOVERLEAF BUILDING 3, 6405 METCALF, OVERLAND PARK, KANSAS 66202, TEL. 913/432-9961

International Specialists in the Environment

CERCLIS CODED

9/10/90

gje

Safety-Kleen	
KSD 9809 73515	105
6-8-90	

MEMORANDUM

TO: Pete Culver, RPO
THRU: Philip Dula, FITOM
FROM: E & E/FIT
DATE: June 8, 1990

RECEIVED

JUN 11 1990

PREP SECTION

SUBJECT: Summary and Recommendations for the Safety-Kleen Corporation site, Edwardsville, Wyandotte County, Kansas.
TDD # F-07-9002-003 PAN #FKS0284RA
Site #S03 Project #001
Superfund Contact: Ken Rapplean
RCRA Contact: Gene Evans
FIT Project Manager: Jim Fick

40201713



SUPERFUND RECORDS

SITE SUMMARY

As part of the U.S. Environmental Protection Agency (EPA) Environmental Priorities Initiative (EPI) program, EPA has requested Ecology and Environment, Inc. Field Investigation Team (E & E/FIT) to conduct an EPI Preliminary Assessment (PA) of Safety-Kleen Corporation located at 9317 Woodend Road, Edwardsville, Kansas.

The scope of the investigation included reviewing existing state and federal files and other literature to characterize regulated and non-regulated solid waste management units (SWMUs) at the facility and to assess the probability of release(s) of hazardous substances from identified SWMU(s) to the local environment. The FIT conducted a Visual Site Inspection (VSI) on March 8, 1990, to aid in identifying and characterizing SWMUs.

Safety-Kleen is an accumulation and storage point for spent solvents generated by Safety-Kleen customers, the majority being small quantity generators, operating under a 1987 RCRA Part B application. The facility utilizes a "closed loop" system which works as follows: the spent solvent collected from Safety-Kleen customers is delivered to the service center where it is stored in the warehouse drum storage area. Biweekly, a box trailer truck is dispatched from a recycling center in Elgin, Illinois, to deliver drums of fresh solvent and collect the drums of spent solvent for reclamation. The unique feature of this system is that Safety-Kleen retains ownership of the solvent. The "closed loop" system allows the company to maintain control of the solvent, except while it is in use at the customer's place of business.

Safety-Kleen encompasses 1.38 acres on the alluvial floodplain approximately 1,500 feet north of the Kansas River and west

of the intersection of Interstate Highway 435 and Woodend Road. The company occupies two buildings: one houses offices, the warehouse drum storage area, and a return and fill station attached to the south end; the other, referred to as the paint waste metal storage shelter, houses all paint waste and lacquer thinner. The FIT identified four SWMUs which are identified and described below.

Warehouse Drum Storage Area

This SWMU consists of 16-gallon dumpster sludge and 16-gallon spent immersion cleaner containers. Dumpster sludge consist of D001, D006, D007, and D008 materials. The spent immersion cleaner consists of F002 and F004 materials. The drums are placed onto wooden pallets inside the storage area with two-foot aisle spacing. Secondary containment is provided by a monolithic concrete pad bounded by a 6-inch-wide by 4-inch-high steel reinforced concrete curb. Inside the containment area are two 8-feet X 2-feet X 20-inches (200 gallon each) collection trenches, poured as part of the monolithic pad. This is a RCRA-regulated SWMU.

Aboveground Storage Tanks

This SWMU consists of one 15,000-gallon aboveground storage tank that contains spent mineral spirits solvent from parts washers. The waste is classified as ignitable (D001) and E.P. Toxic for cadmium, chromium, and lead (D006, D007, and D008). Tank bottom sludge is also contained inside the storage tank and the sludge exhibits the same hazardous waste characteristics as the spent mineral spirits solvent. The secondary containment structure for these tanks is a steel reinforced monolithic concrete slab with curbing measuring 50 feet X 20 feet X 3 feet. The containment volume is 18,554 gallons. This SWMU is RCRA regulated.

Solvent Return and Fill Station (Two Dumpsters)

This SWMU consists of two dumpsters which contain spent mineral spirits and dumpster sludge from parts washers. As soon as the wastes are disposed into the dumpsters, the wastes are immediately transferred into the 15,000 gallon aboveground storage tank. Each dumpster has a total capacity of 750 gallons. Dumpster sediment also accumulates at the bottom of both dumpsters. The wastes are classified as ignitable (D001), and E.P. toxic for cadmium, chromium, and lead (D006, D007 and D008). Secondary containment is provided by a monolithic 40-feet X 30-feet X 6-inch (4,488 gallon capacity) concrete slab and curb structure. This SWMU is RCRA regulated.

Paint Waste Metal Storage Shelter

This SWMU consists of various lacquer thinners (D001, F003, and F005) and paints. The wastes are placed in 5-gallon pails and 16-gallon and/or 55-gallon drums, and are stored in the paint waste storage shelter. Secondary containment is provided by a 20-feet X 15-feet X 6-inch (1,122 gallons capacity) concrete slab with a metal pan at its base. This SWMU is RCRA regulated.

Safety-Kleen has been in operation since April 11, 1985. A review of state and federal files for this facility provided no information suggesting releases from the site. Observations made during the March 8, 1990, VSI of the identified SWMUs and the facility as a whole

Safety-Kleen Corporation
Summary and Recommendations
Page 3

indicated that the design and operational procedures incorporated are of high standard. One low level air release was noted in the warehouse drum storage SWMU where volatile organic vapors were reported at 3 ppm on the HNu field air monitoring unit.

A summary of each solid waste management unit and recommendations for further work at each unit is presented below.

Summary of Solid Waste Management Units

SWMU Description Dates of Operation	Evidence of Release/ Major Pathway (s)	Further Action Recommended
Warehouse Drum Storage April 11, 1985-current	HNu read 3 ppm/ Air pathway	OSHA Inspection
Aboveground Storage Tank April 11, 1985-current	*None documented/none	None
Solvent Return and Fill Station (Two Dumpsters) April 11, 1985-current	*None documented/none	None
Paint Waste Metal Storage Shelter April 11, 1985-current	*None documented/none	None

* Barring a catastrophic release (i.e. tank failures and containment failure) no pathways are significantly threatened by routine operations of this facility.

Observations made during the VSI indicate that the operational procedures at this facility are designed to minimize or eliminate the potential for release of hazardous waste through all phases of handling. All SWMUs identified in this study have secondary containment and apparently are in good condition.

This site has been in operation since April 11, 1985. A review of state and federal files indicates that this facility has no history of releases. During the VSI, VOCs were detected in ambient air in the warehouse drum storage area as indicated by an HNu instrument reading of 3 ppm (benzene equivalents). A ventilation fan in the southeast corner of the warehouse building vents into the air outside. Air is the primary pathway of concern, barring any catastrophic, man-made, or natural disaster. Should a significant release occur that cannot be mitigated by the secondary containment structures, the threat of ground water contamination is substantial. Surface water is not threatened, unless a ground water to surface water release occurred. Twenty-one alluvial wells occur within 1 1/2 miles of the site, and a surface water intake exists downgradient on the Kansas River within 1/2 mile of the site. Together these potable water supplies serve 240,000 residents, which represent the target population.